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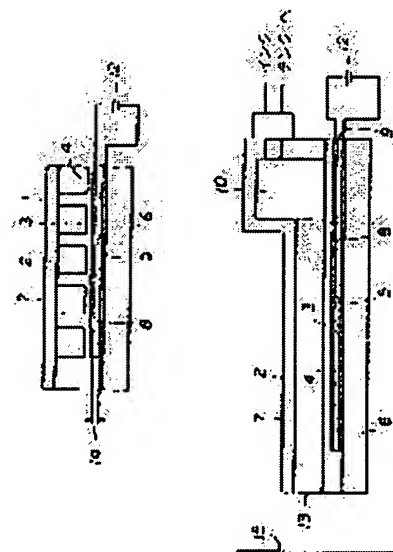
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(54) RECORDING HEAD

(57)Abstract:

PURPOSE: To rapidly raise a dielectric constant to allow the pulsative use of a direct current bias voltage and to use a heating pulse with a low drive voltage to realize a reduction of cost to a great extent by providing a first electrode using a vibrating member for a part or all of a flow path component forming a flow path for a recording material and a second electrode formed out of the flow path correspondingly to the first electrode.

CONSTITUTION: Discrete electrodes 4 disposed on the rear surface (where a flow path 7 is not formed) of a vibrating plate 3 each hold insulating properties. A common electrode 5 is disposed on a substrate 6 on a position corresponding to the discrete electrodes 4 spaced an appropriate gap 14 therefrom and connected to a power source 12. When a voltage is applied between the discrete electrodes 4 and the common electrode 5 in this construction, the vibrating plate 3 is deflected due to an electrostatic force, the capacity of the flow path 7 is increased, and an ink is supplied from a common liquid chamber 10. After that, when the applied voltage is interrupted, the deflected vibrating plate 3 is recovered to the former state to pressurize the ink in the flow path 7. Then, the



ink is jetted out of a jetting port 13 by the pressurized energy as an ink drip to be applied on paper 15 and recorded. A drive generation part is not formed within the flow path but out of the flow path, thus eliminating the need for taking the characteristics of the ink (e.g., a dielectric constant and insulating properties) into consideration.

LEGAL STATUS

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